Briefing National Energy Policy

Friday, July 9, 2021

NEAT (National Energy Advisory Team)

Next Meeting, Monday, July 19, 2021 at 2:00 pm CST

The previous meeting of the group was held on Tuesday, July 6, 2021.

Recurring Hot Topics

- E.O. 13990 and the CAA 111 Oil and Gas Performance Standards (OOOO/a/b/c)
- IOGCC & EPA Taskforce Member Selection and Taskforce Meeting

Oil and Gas

Big American shale producers are reportedly selling oil at a loss despite soaring crude prices

Oil prices above \$70 have not lifted the fortunes of some US shale producers who have been stuck selling at pandemic-era oil prices, according to a [HYPERLINK

"https://www.ft.com/content/0d60da9b-54ad-4027-b054-2ff25261e506" \t "_blank"].

Nearly a third of US oil output is being sold at \$55 a barrel, while some especially unlucky producers are selling below \$50, the FT reports, citing IHS Markit data.

The culprit is hedging contracts taken out during the depths of the pandemic, effectively locking in low oil prices for producers who had feared further price declines. In April 2020, as it became prohibitively expensive to store oil, West Texas Intermediate crude traded at sub-zero values for the first time ever, briefly bottoming out at -\$37.63 per barrel.

As a result, shale producers rushed to hedge against persistently low prices, leaning on [HYPERLINK "https://www.worldoil.com/news/2021/4/26/oil-and-gas-companies-hedging-production-farther-into-the-future" \t "_blank"] to bet against oil going up. But a brisk recovery and OPEC oil-supply cuts have pushed up crude prices, sinking US producers' hedges, according to the FT.

Some of the sharpest losses are hitting Pioneer Natural Resources, the largest producer in Texas's Permian Basin region, which is committed to selling almost 200,000 barrels a day below \$50 per barrel through 2021. That has added up to an expected \$900 million loss from hedging this year, according to JPMorgan. "If you get hedging right, people don't give you credit for it. If you get it wrong, you get hammered," Raoul LeBlanc, a VP at IHS Markit, told the FT. "They missed the boat this year," he said.

Nearly half of oil and gas emissions could be cut without spending a penny

As the world's economy rebounds from the COVID-19 pandemic, demand for oil and gas is set to increase — and so is the emission of methane, a potent greenhouse gas with 80 times the heat-trapping power of carbon dioxide. The fossil fuel industry is one of the biggest sources of human-generated [HYPERLINK "https://www.cbsnews.com/news/who-are-the-biggest-us-methane-emitters/" \t "_blank"], emitting 70 metric tons of the polluting gas last year — roughly equivalent to all the carbon dioxide produced by the European Union. Now for the good news: About 40% of methane emissions from oil and gas production can be eliminated without costing a cent, the U.S. Energy Information Agency said in a recent [HYPERLINK

"https://iea.blob.core.windows.net/assets/4fee1942-b380-43f8-bd86-

671a742db18e/GasMarketReportQ32021 includingGas2021Analysisandforecastto2024.pdf" \t " blank"

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]. Cutting down that number "is among the most cost-effective and impactful actions that governments can take to achieve global climate goals," according to the agency. Natural gas is produced by drilling or hydraulic fracturing (better known as fracking), and is also extracted as a byproduct of drilling for oil. Because the gas is invisible and odorless, detecting leaks can be challenging. And leaks can occur at any point in the process, from extraction out of the ground to the moment where the gas is burned in a power plant. Among the most cost-effective steps natural gas producers can take is replacing old equipment, the EIA notes. Many pumps, valves and compressors on a gas-drilling pad emit methane in the course of their operations, and tend to emit more as they age — especially if they aren't maintained. The EIA recommends replacing many components early and replacing gas-powered parts with electrified versions, which leak less gas in their operations. Detecting leaks early and often, through technology such as [HYPERLINK "https://www.cbsnews.com/news/methane-permian-basin-oil-gas-climate-change/" \t "_blank"], can also help plug up leaks. The EIA also [HYPERLINK

"https://www.iea.org/reports/methane-tracker-2021/methane-and-climate-change" \t "_blank"] eliminating the practice of venting, or releasing natural gas straight into the atmosphere, in order to empty a pipe for maintenance or when extraction companies are getting rid of unwanted natural gas to collect oil. "Natural gas is essentially just methane, and in many cases if you can avoid that methane leak, you can sell that gas for profit," Christophe McGlade, the head of IEA's Energy Supply Unit, told CBS MoneyWatch. [HYPERLINK

"https://www.cbsnews.com/news/climate-change-methane-natural-gas-oil-emissions/"]

Week of 7/02, reported on 07/08

EIA Gas Storage Report, US Lower 48 States

2,574 BCF, <u>up</u> from 2,558 BCF previous week, 3,125 BCF one year ago. Five-year average is 2,764 BCF for this week. 2018-2020 Max fill was about 4,000 BCF, so we are about 64.3% full.

US Rig Count

From Baker Hughes as of June 25, 2021

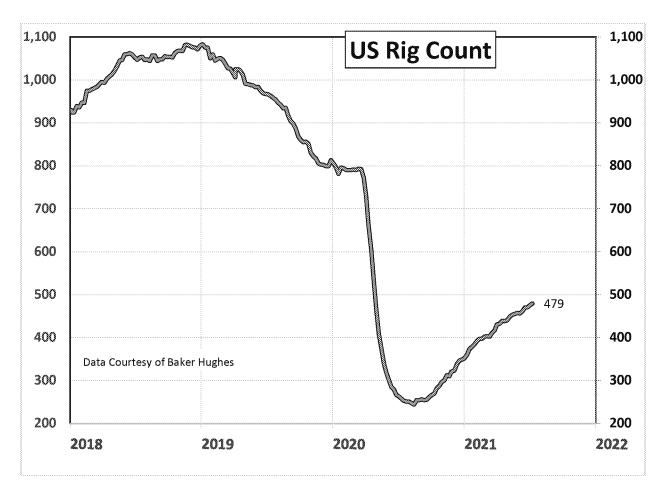
The US rig count increased this week to 479. The US rig count is rebounding from its recent low of 244 on August 14, 2020.

US rig count has rebounded from its low and is currently increasing with only three weeks of declining rig counts in the last ten months.

479 US rigs this week. 475 US rigs last week.

<u>Up</u> 221 rigs from one year ago (46.2% increase), 258 one year ago 237 active rigs in Permian Basin (49.5% of total)

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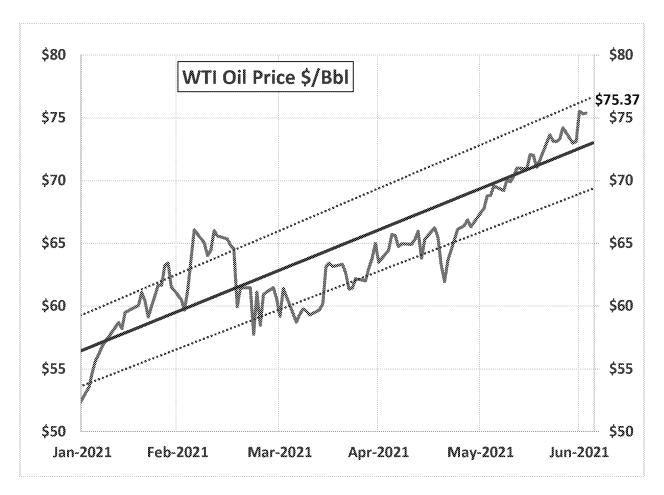


Drilling rigs are active in 15 states this week.

Date	TX	NM	LA	OK	PA	ND	CO	UT	WY	WV	ОН	CA	AK	IL	MI	US
7/2/2021	222	75	52	27	19	18	13	10	9	9	9	6	4	1	1	475
7/9/2021	224	75	53	27	18	18	12	10	10	10	10	6	4	1	1	479

[LINK Excel.Sheet.8 "https://d.docs.live.net/4270380a6b5bd942/!Personal/NEPA/EIA OIL Production/EIA Prodn Data Keep.xls" "Sheet1!R38C8:R52C15" \a \f 4 \h * MERGEFORMAT | WTI Oil Price

WTI oil price has demonstrated a robust increase since November 2020, with a notable jump three months ago. Forecasts as of 04/29/2021 have WTI approaching \$80 a barrel by midsummer.



Weekly US Crude Oil Stock (excluding SPR) for the week ending on 07/02/2021 is 445,476 thousand barrels

<u>Down</u> 6,866 thousand barrels from 452,342 thousand barrels the previous week.

April 2021 released June 30, 2021

EIA Oil Production

US oil production for April-2021 was 11.168 million barrels per day (BOPD), down 388,000 BOPD from March's production rate. This is a 3.4% decrease from March's rate. Texas led state production even with a 2.3% month over month production decrease which equates to 112,000 BOPD decrease.

		Apr-21						
		Thousand		Recent				
		BOPD	MoM %	YoY %	High	Change %		
	US	11,168	-3.4%	-7.0%	Nov-19	-13.1%		
1	TX	4,790	-2.3%	-7.4%	Mar-20	-11.9%		
	GOM	1,763	-8.7%	-7.7%	Aug-19	-13.7%		
2	NM	1,172	-1.8%	11.2%	Mar-21	-1.8%		
3	ND	1,029	-3.0%	-15.4%	Nov-19	-32.3%		
4	AK	446	-4.7%	-3.5%	Mar-17	-15.1%		

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5	CO	400	5.4%	-18.9%	Nov-19	-28.9%
6	OK	399	-4.1%	-18.7%	Apr-19	-34.8%
7	CA	362	-3.6%	-12.2%	Apr-15	-35.6%
8	WY	232	0.5%	-4.6%	Dec-19	-23.1%
9	LA	96	-4.6%	-3.1%	May-15	-49.2%
10	UT	91	-3.2%	11.4%	Sep-18	-18.0%

Natural Gas Price

Henry Hub Spot closed on July 6 at \$3.68/MMBtu after the \$23.86/MMBTU spike from February 17

